Applicants: BABIN et al. Appl. No. 10/786,017

## Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 8-12, 17-19, 22, and 24-32 are pending in the application, with claims 8, 19, 26, and 28 being the independent claims. Claims 1-7, 13-16, 20, 21, and 23 have been cancelled without disclaimer of or prejudice to the subject matter recited therein. Claims 26-32 have been added. The amendments to the claims are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

## Rejections under 35 U.S.C. § 102

Claims 8-9 and 11-12 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Choi et al. (U.S. 2002/0149135 A1). Applicants respectfully traverse the rejection. First, Choi et al. is not prior art to the present application under 35 U.S.C. § 102(b). Choi et al. published on October 17, 2002. The present application is entitled to the February 26, 2003 filing date of U.S. Application No. 60/449,597. Accordingly, Choi et al. did not publish more than one year prior to the filing date of the present application.

Further, independent claim 8 has been amended to recite a flow rotator disposed at a junction between an upstream melt passage and a pair of downstream melt passages. The flow rotator includes an inlet aligned with the upstream melt passage, and an inlet passage for receiving melt from the inlet. The inlet passage is curved such that a downstream portion thereof is substantially perpendicular to the upstream melt passage. Further, the melt

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divides into a first outlet passage and a second outlet passage communicating with the inlet passage. Each of the outlet passages has a curved path to a respective first and second outlet, wherein the first and second outlets are disposed on opposite sides of the flow rotator. The first and second outlets each communicate with a respective one of the pair of downstream melt passages such that melt flow from the upstream melt passage is substantially equally divided to flow in opposite directions in the pair of downstream melt passages. Choi et al. do not disclose such an arrangement. Choi et al. disclose different embodiments of turbulence inducing members. However, none of the embodiments discloses a separate flow rotator disposed at a junction between an upstream melt passage and a pair of downstream melt passages. Further, Choi et al. do not disclose the specific arrangement of the flow rotator recited in independent claim 8, as noted above. Accordingly, because Choi et al. do not disclose each and every element of independent claim 8, it does not anticipate claim 8. Claims 9, 11 and 12 depend from and add feature to independent claim 8, and are therefore not anticipated by Choi et al. for at least the same reasons as independent claim 8.

Claims 8-25 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Beaumont et al. (U.S. 6,503,438). Claims 13-16, 20, 21, and 23 have been cancelled, thereby rendering their rejection moot. Applicants respectfully traverse the rejection of the remaining claims. Beaumont et al. do not disclose each and every element of the claims of the present application. In particular, independent claims 8 and 19 each recite that the flow rotator is substantially cylindrical. The repositioning runner system of Beaumont et al. is

not substantially cylindrical. Accordingly, because the Beaumont et al. patent does not disclose each and every element of independent claims 8 and 19, it does not anticipate claims 8 and 19. Claims 9-12, 17, 18, 22, 24, and 25 depend from and add features to one of independent claims 8 and 19, and are therefore not anticipated by Beaumont et al. for at least the same reasons as independent claims 8 and 19.

Claims 8-9, 11-16, and 19-23 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Bouti (U.S. 6,382,528). Claims 13-16, 20, 21, and 23 have been cancelled, thereby rendering their rejection moot. Bouti is not prior art to the present application under 35 U.S.C. § 102(b), as its May 7, 2002 publication date is not more that one year before the February 28, 2003 filing date to which the present application is entitled. Further, independent claims 8 and 19 each recite a flow rotator with in inlet passage that is bent such that a downstream portion of the inlet passage is substantially perpendicular to the upstream passage and first and second outlet passages communicating with the inlet passage. The outlet passages are curved path from the junction with the inlet passage to a respective first and second outlet. The first and second outlets each communicate with a downstream melt passage such that the melt stream is divided. Bouti does not disclose such a device. The mixer of Bouti includes an inlet that is aligned with the outlet, as opposed to a pair of outlets recited in claims 8 and 19. Further, Bouti does not disclose a bent inlet passage such that a downstream portion of the inlet passage is substantially perpendicular to the upstream melt passage, as recited in claims 8 and 19. For at least these reasons, Bouti does not anticipate

independent claims 8 and 19 of the present application, or claims 9, 11, 12, and 22 that depend therefrom.

Claims 8-9 and 11-14 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Swaroop (U.S. 4,299,553). Claims 13 and 14 have been cancelled, thereby rendering their rejection moot. Plug 22 disclosed in the Swaroop patent does not include the features recited in independent claim 8 of the present invention. For example, plug 22 does not include an inlet passage that is bent such that a downstream portion thereof is substantially perpendicular to the upstream melt passage. Nor does plug 22 include a pair of curved outlet passage communicating with the inlet passage such that the flow of melt is split into two streams at a junction between the inlet passage and the outlet passages, as recited in independent claim 8. For at least these reasons, Swaroop does not anticipate independent claim 8 or claims 9, 11 and 12 that depend therefrom.

For the reasons stated above, Applicant respectfully requests that the rejections be withdrawn.

## New Claims

New claims 26-32 have been added, with claims 26 and 28 being independent claims. Applicants believe that these claims are in condition for allowance.

## Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the

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outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

MEDLER FERRO PLLC

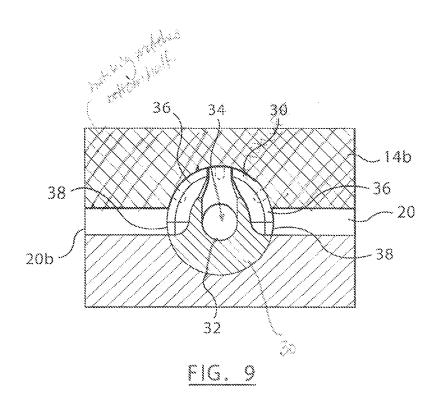
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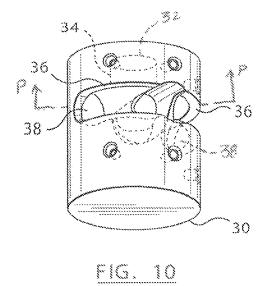
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Annotated Sheet
Appl. No. 10/786,107
Babin et al.
Hot Runner Manifold Plug for Rheological Balance in
Hot Runner Injection Molding





Annotated Sheet Appl. No. 10/786,107 Babin et al. Hot Runner Manifold Plug for Rheological Balance in Hot Runner Injection Molding

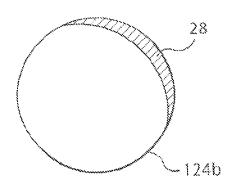


FIG. 16

